REMARKS

We are in receipt of the Office Action dated February 28, 2003, and the above amendment and the following remarks are made in light thereof.

Claims 6, 7 and 10-30 are pending in the application, Claims 13-18 have been withdrawn from consideration by the examiner pursuant to the Office Action of September 25, 2002. Claims 6, 7, 10-12 and 19-30 stand rejected, the rejection having been made final.

Before turning to the substance of the rejection, the examiner indicated that the Information Disclosure Statement filed on February 10, 2003 failed to include a legible copy of page 31 of Yamazaki et al. application serial number 09/685,698, filed October 10, 2000. The legible copy of page 31 accompanies this amendment.

The examiner also indicated that he would not consider the Japanese patent documents cited in Information Disclosure Statement of February 10, 2003 because these documents are not in the English language.

Applicant notes that an English abstract of each of the Japanese patent documents was included with the Information Disclosure Statement, the examiner having indicated that he considered these publications when preparing the Office Action

of February 28, 2003. Accordingly, applicant respectfully request that the examiner indicate that he has considered the Japanese patent documents that were provided with the Information Disclosure Statement.

The examiner is also requiring that the withdrawn Claims 13-18 be cancelled. By the present amendment, these claims are being cancelled without prejudice to presentation in a divisional application.

Turning to the merits of the Office Action, claims 6, 10-11, 19-20 and 22-24 stand rejected for being obvious over Miyashita et al. WO 98/24271 in view of Horike US 4,281,232. Claims 7 and 21 are rejected for obviousness over Miyashita et al. in view of Horike and further in view of Fijimura et al. US 4,737,803. Claims 12 and 25 are rejected for obviousness over Miyashita et al. in view of Horike and further in view of Iguchi WO 98/27579. Claims 26 and 28-29 stand rejected for obviousness over Miyashita et al. in view of Horike and further in view of Kurosawa et al. US 6,057,647. Claim 27 is rejected for obviousness over Miyashita et al. in view Horike and further in view of Kurosawa and Fijimura et al. Claim 30 is rejected for being obvious over Miyashita et al. in view Horike, and further in view of Kurosawa and Iguchi.

Pursuant to the present amendment, all of the pending claims recite the feature of continuously discharging the application liquid to a pixel column. The newly added claims 31-47 recite the feature of discharging the application liquid to a pixel column and scanning the nozzle along a direction parallel to the pixel column.

None of the references relied upon the examiner, except for Iguchi, teach these features. Miyashita et al., Fijimura et al. and Horike are directed to ink-jet technology, by which it was well known that ink drops are discharged from an injection head or nozzle intermittently - - not continuously. Iguchi et al. do teach "a step of continuously applying a phosphor paste containing a phosphor powder and an organic compound onto a substrate with a plurality of barrier ribs from a paste applicator with a plurality of outlet holes", as set forth in the Abstract, second paragraph. However, Iguchi et al. is not directed to a self-light-emitting device with an EL layer, but to a plasma display. Further, Iguchi et al. do not teach discharging a solution comprising an EL material, but applying a phosphor paste containing a phosphor powder and an organic compound. Therefore, there is no suggestion or motivation to combine Iguchi et al. with any of the other references in order to realize the present invention.

In view of the foregoing, applicant respectfully submits that the pending claims are allowable over the art of record, and an early Office Action allowing the claims is earnestly solicited.

Respectfully submitted,

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dichloromethane is used as a solvent, and then volatilized by performing heat treatment on a hot plate at 80 to 150°C for 1 to 5 minutes.

Next, a hole injection layer 349 is formed to a thickness of 20 nm. Since the hole injection layer 349 may be provided commonly for all the pixels, it is appropriate to form the hole injection layer 349 by utilizing the spin coating method or the printing method. In Embodiment 1, polythiophene (PEDOT) is applied as a solution, and heat treatment is performed on a hot plate at 100 to 150°C for 1 to 5 minutes to thereby volatilize its moisture. In this case, the hole injection layer 349 can be formed without dissolving the light emitting layer 348 because polyphenylene vinylene or polyalkylphenylene is insoluble.

It is to be noted that a low molecular organic EL material may be used as the hole injection layer 349. In this case, it is appropriate to form the hole injection layer by the evaporation method.

A two-layered structure made of the light emitting layer and the hole injection layer is formed in Embodiment 1. However, other layers such as a hole transporting layer, an electron injection layer, and an electron transporting layer may also be provided. Examples of various lamination structures of such combination of layers have been reported, and any structure may be used for the present invention.

After the formation of the light emitting layer 348 and the hole injection layer 349, an anode 350 made of a transparent conductive film is formed to a thickness of 120 nm. Indium oxide, which is doped with 10 to 20 wt% of zinc oxide, is used for the transparent conductive film in Embodiment 1. As the film deposition method, it is preferable to form the anode 350 by evaporation at room temperature so that the light emitting layer 348 and the hole injection layer 349 are not deteriorated.

A second passivation film 351 made of a silicon oxide nitride film is formed to a